

1. (Amended three times) A method for providing a system for high fidelity reproduction of the acoustic signal from a selected type of acoustical generator [sound of a selected type of acoustic instrument], the method comprising:

- (1) determining a selected location proximate to an acoustical generator;
- (2) [(1)] placing a first microphone at [a] said selected location [proximate to the acoustic musical instrument];
- (3) [(2)] separately generating sounds from the acoustical generator [playing the musical instrument] to produce sounds as picked up by the first microphone;
- (4) [(3)] playing reference sounds of the acoustical generator [instrument];
- (5) [(4)] comparing the sounds of the acoustical generator [musical instrument] as picked up by the first microphone with the reference sounds [directly from] as generated by the acoustical generator [instrument]; and
- (6) [(5)] [designing] constructing a tailor-made equalizer for the first microphone, said equalizer including an arrangement of tailored filter elements to compensate for [the] differences between the sounds as picked up by the microphone at the selected location and the reference sounds [directly from] as generated by the acoustical generator [instrument].

2. (Amended) The method of claim 1 wherein in said placing step, said first microphone is attached to the acoustical generator [acoustic musical instrument].

3. (Amended) The method of claim 1 wherein the step of comparing the sounds picked up by the first microphone with reference sounds of the acoustical generator [instrument] is made by listening directly to the two sounds.

4. (Amended) The method of claim 2 wherein the step of comparing the sounds picked up by the first microphone with reference sounds of the acoustical generator [instrument] is made by listening directly to the two sounds.

5. (Amended) [The method of claim 1, further comprising repeating steps (1) through (3) using different musical instruments of the same type to determine adjustment ranges for sections of the equalizer designed in step (4).]

A method for providing a system for high fidelity reproduction of the acoustic signal from a selected type of acoustical generator, the method comprising:

(1) determining a selected location proximate to a first embodiment of a selected type an acoustical generator;

(2) placing a first microphone at said selected location;

(3) separately generating sounds from the acoustical generator, to produce sounds as picked up by the first microphone;

(4) playing reference sounds of the acoustical generator;

(5) comparing the sounds of the acoustical generator as picked up by the first microphone with the reference sounds as generated by the acoustical generator;

(6) replacing the first embodiment of the acoustical generator of step (1) with a next embodiment of the selected type of acoustical generator;

(7) repeating steps (2) through (5) with the next embodiment of the selected type of acoustical generator;

(8) constructing a tailor-made equalizer for the first microphone, said equalizer including an arrangement of tailored filter elements to compensate for differences between the sounds as picked up by the microphone at the selected location and the reference sounds as generated by the acoustical generator.

13. (Amended three times) A system for high fidelity electronic reproduction of the acoustic signal from a selected type of acoustical generator [sound of an acoustic musical instrument], the system comprising:

a microphone element adapted to be placed at a specified selected location proximate to the acoustical generator [proximately to a preselected type of acoustic musical instrument]; and

an equalizer [having an input coupled to the microphone, the equalizer] that includes an arrangement of tailored filter elements to compensate for differences between the sounds of the acoustical generator as picked up by the microphone at the selected location [including a particular arrangement of a predetermined minimum number of electronic filter circuits and controls, with optimized control ranges needed to compensate for differences in the electronic reproduction by the microphone element of sounds from the preselected type of acoustic musical instrument to be input to the microphone element,] compared with corresponding reference sounds as generated by the acoustical generator [directly from said type of musical instrument].

14. (Amended) The system of claim 13 wherein the microphone element is further adapted to be attached to a preselected location on the acoustical generator [musical instrument].

Please add the following new claims:

Clean Version of Amended Claims:

1. (Amended three times) A method for providing a system for high fidelity reproduction of the acoustic signal from a selected type of acoustical generator, the method comprising:

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- (1) determining a selected location proximate to an acoustical generator;
 - (2) placing a first microphone at said selected location;
 - (3) separately generating sounds from the acoustical generator to produce sounds as picked up by the first microphone;
 - (4) playing reference sounds of the acoustical generator;
 - (5) comparing the sounds of the acoustical generator as picked up by the first microphone with the reference sounds as generated by the acoustical generator; and
 - (6) constructing a tailor-made equalizer for the first microphone, said equalizer including an arrangement of tailored filter elements to compensate for differences between the sounds as picked up by the microphone at the selected location and the reference sounds as generated by the acoustical generator.

2. (Amended) The method of claim 1 wherein in said placing step, said first microphone is attached to the acoustical generator.

3. (Amended) The method of claim 1 wherein the step of comparing the sounds picked up by the first microphone with reference sounds of the acoustical generator is made by listening directly to the two sounds.

4. (Amended) The method of claim 2 wherein the step of comparing the sounds picked up by the first microphone with reference sounds of the acoustical generator is made by listening directly to the two sounds.

5. (Amended) A method for providing a system for high fidelity reproduction of the acoustic signal from a selected type of acoustical generator, the method comprising:

D) (1) determining a selected location proximate to a first embodiment of a selected type an acoustical generator;

(2) placing a first microphone at said selected location;

(3) separately generating sounds from the acoustical generator, to produce sounds as picked up by the first microphone;

(4) playing reference sounds of the acoustical generator;

(5) comparing the sounds of the acoustical generator as picked up by the first microphone with the reference sounds as generated by the acoustical generator;

(6) replacing the first embodiment of the acoustical generator of step (1) with a next embodiment of the selected type of acoustical generator:

(7) repeating steps (2) through (5) with the next embodiment of the selected type of acoustical generator;

(8) constructing a tailor-made equalizer for the first microphone, said equalizer including an arrangement of tailored filter elements to compensate for differences between the sounds as picked up by the microphone at the selected location and the reference sounds as generated by the acoustical generator.

D2 13. (Amended three times) A system for high fidelity electronic reproduction of the acoustic signal from a selected type of acoustical generator, the system comprising:
a microphone element adapted to be placed; and
an equalizer that includes an arrangement of tailored filter elements to compensate for differences between the sounds of the acoustical generator as picked up by the microphone at the selected location compared with corresponding reference sounds as generated by the acoustical generator.

14. (Amended) The system of claim 13 wherein the microphone element is further adapted to be attached to a preselected location on the acoustical generator.